



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,231	01/21/2004	Kia Silverbrook	MPA27US	2209

24011 7590 06/15/2007  
SILVERBROOK RESEARCH PTY LTD  
393 DARLING STREET  
BALMAIN, 2041  
AUSTRALIA

EXAMINER

GOLDBERG, BRIAN J

ART UNIT	PAPER NUMBER
----------	--------------

2861

MAIL DATE	DELIVERY MODE
-----------	---------------

06/15/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/760,231

Applicant(s)

SILVERBROOK ET AL.

Examiner

Brian Goldberg

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/16/07 has been entered.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Silverbrook et al. (US 6439908).

3. Regarding claim 1, Silverbrook et al. disclose "at least one printhead module part (10 of Fig 2) comprising at least two printhead integrated circuits (18 of Fig 4), each of which has nozzles formed therein for delivering printing fluid onto the surface of print media (col 3 ln 45-47), a support member (16 of Fig 7 or 28 of Fig 8) supporting and carrying the printing fluid for the at least two printhead integrated circuits, and an electrical connector (48 of Fig 8) for connecting electrical signals to the at least two printhead integrated circuits; a drive electronics part incorporating at least two

controllers each arranged on a printed circuit board so as to control operation of at least one of the at least two printhead integrated circuits (col 3 ln 48-50 and ln 59-65); a casing part (14 of Fig 2) comprising a support frame (64, 94, lower parts of 76 and 32 of Fig 2) removably supporting the at least one printhead module at the support member of the printhead module (16 of Fig 7 or 28 of Fig 8) and at least two mounting elements (28 of Fig 2) arranged in abutting relationship along a longitudinal direction of the casing (see Fig 2) so that the at least one printhead module and the mounting elements (28 of Fig 2) are movable relative to the casing (if the module and mounting elements are removably supported, then they must be movable relative to the casing for them to be removed, i.e., removing the module from the casing is movement of the module relative to the casing), each of the printed circuits boards (22 of Fig 8) being removably supported by at least one of the two or more mounting elements (28 of Fig 2); and an electrical connecting member part (98, 56 of Fig 14) comprising a non-conductive material (96 of Fig 14) clad with conductive strips (58 and 60 of Fig 14) arranged between the abutting mounting elements (see Fig 3) so that the conductive strips are positioned to overlay a series of spaced connection strips (102 and 106 of Fig 3) at edge regions of each of the individual printed circuit boards (54 of Fig 3).” Please see additional explanation below in “Response to Arguments”.

4. Regarding claim 2, Silverbrook et al. disclose “wherein each of the mounting elements comprises side regions (46 of Fig 5) having raised and recessed portions arranged so that the recessed portions of the abutting mounting elements form a recess

into which the electrical connecting member (56, 98 of Fig 14) can be placed (col 2 In 54-58)."

5. Regarding claim 3, Silverbrook et al. disclose "wherein the electrical connecting member is arranged so as to fit within the recess formed between abutting mounting elements (see Fig 3)."

6. Regarding claim 4, Silverbrook et al. disclose "wherein there is twice as many conductive strips (58 and 60 of Fig 14) as there are connection strips of the printed circuit boards (28 of Fig 3), whereby each connection strip of the printed circuit board will engage with at least one of the two adjacent conductive strips (see Fig 3)."

7. Regarding claim 5, Silverbrook et al. disclose "wherein one printed circuit board having one controller (col 3 In 49-50 and 59-65) thereon is supported by more than one mounting element (28, 26, 24 of Fig 3)."

8. Regarding claim 6, Silverbrook et al. disclose "the connection strips of the printed circuit board supported by the mounting element at one end of the support frame are connected to a data input (col 3 In 59-64); and the connection strips of the printed circuit board supported by the mounting element at the other end of the support frame are terminated (see Fig 3)."

9. Regarding claim 7, Silverbrook et al. disclose "the at least one printhead module (10 of Fig 2) is formed as a unitary arrangement of the at least two printhead integrated circuits (18 of Fig 4), the support member (16 of Fig 7), the electrical connector (48 of Fig 8), and at least two fluid distribution members (26 of Fig 7) each mounting one of the at least two printhead integrated circuits to the support member; and the support

Art Unit: 2861

member has at least one longitudinally extending channel (80 of Fig 7) for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures (42 of Fig 7) extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (see Fig 7 and col 3 ln 45-47)."

### ***Response to Arguments***


10. Applicant's arguments filed 5/16/07 have been fully considered but they are not persuasive. The applicant's argument that since the ink reservoir is heat staked to the casing, the module is not removable is not persuasive. The module can still be forcefully removed, even if it is heat staked. Furthermore, one may consider 28 of figure 8 of Silverbrook et al. to be the support member as cited above, which would clearly comprise a removably mounted module, since the snapping clips are a removable means. Similarly, if a casing comprising a support frame removably supports the modules as cited above, then movement of the module relative to the casing must be allowed when the module is removed from the casing, since removing the module requires movement relative to the casing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goldberg whose telephone number is 571-272-2728. The examiner can normally be reached on Monday through Friday, 9AM-5PM EST.

Art Unit: 2861

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on 571-272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian Goldberg   
AU 2861  
June 8, 2007



**MATTHEW LUU**  
**SUPERVISORY PATENT EXAMINER**